

Figure A-302. Hamburger-Flugzeugbau HFB-320, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Hawker Siddeley

Aircraft Engine Manufacturer Rolls-Royce (Bristol Viper 522)

No. of Engines 2 Engine Rating 3,360 lb

Min. T/O Wt. 14.8 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 23.3 k-lb Max. T/O Wt. War-Time 23.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,440 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 15.0 k-lb Max. Ldg. Wt. 20.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,020 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. †

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra	High A	Medium B	Low C	Very
				Low D				Low D
15	4	4	4	4	3	3	4	4
20	5	5	6	6	4	4	5	6
23	6	6	7	7	5	5	6	7

Figure A-303. Hawker Siddeley HS-125

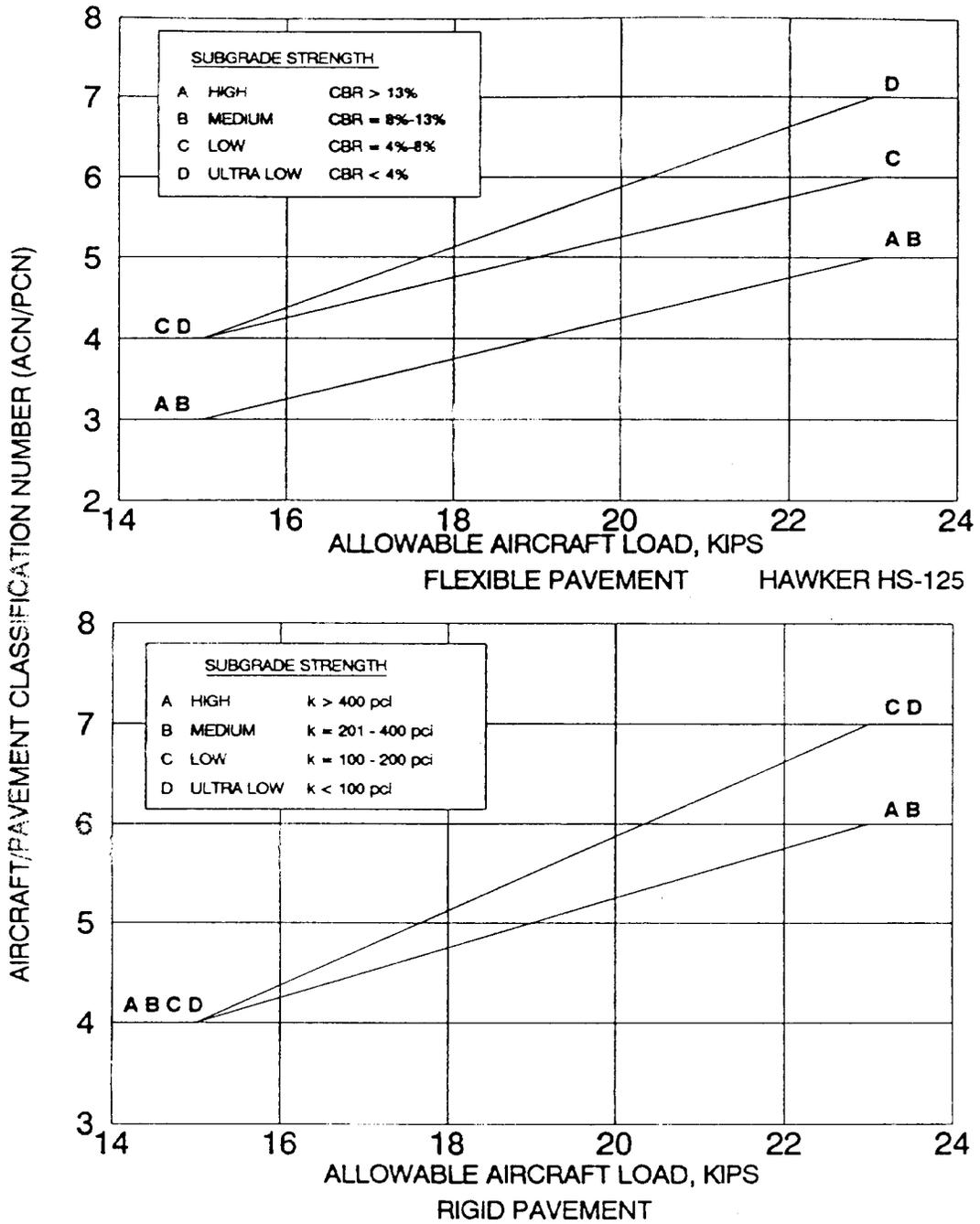


Figure A-304. Hawker Siddeley HS-125, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Israel Aircraft Industries

Aircraft Engine Manufacturer General Electric (CJ610-5)

No. of Engines 2 Engine Rating 2,950 lb

Min. T/O Wt. 12.5 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 18.5 k-lb Max. T/O Wt. War-Time 18.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 2,720 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 12.7 k-lb Max. Ldg. Wt. 17.6 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
13	5	5	5	5	5	5	5	5
18	8	8	8	8	7	7	7	7
19	8	8	8	8	8	8	8	8

Figure A-305. Israel Aircraft 1121, Commodore Jet

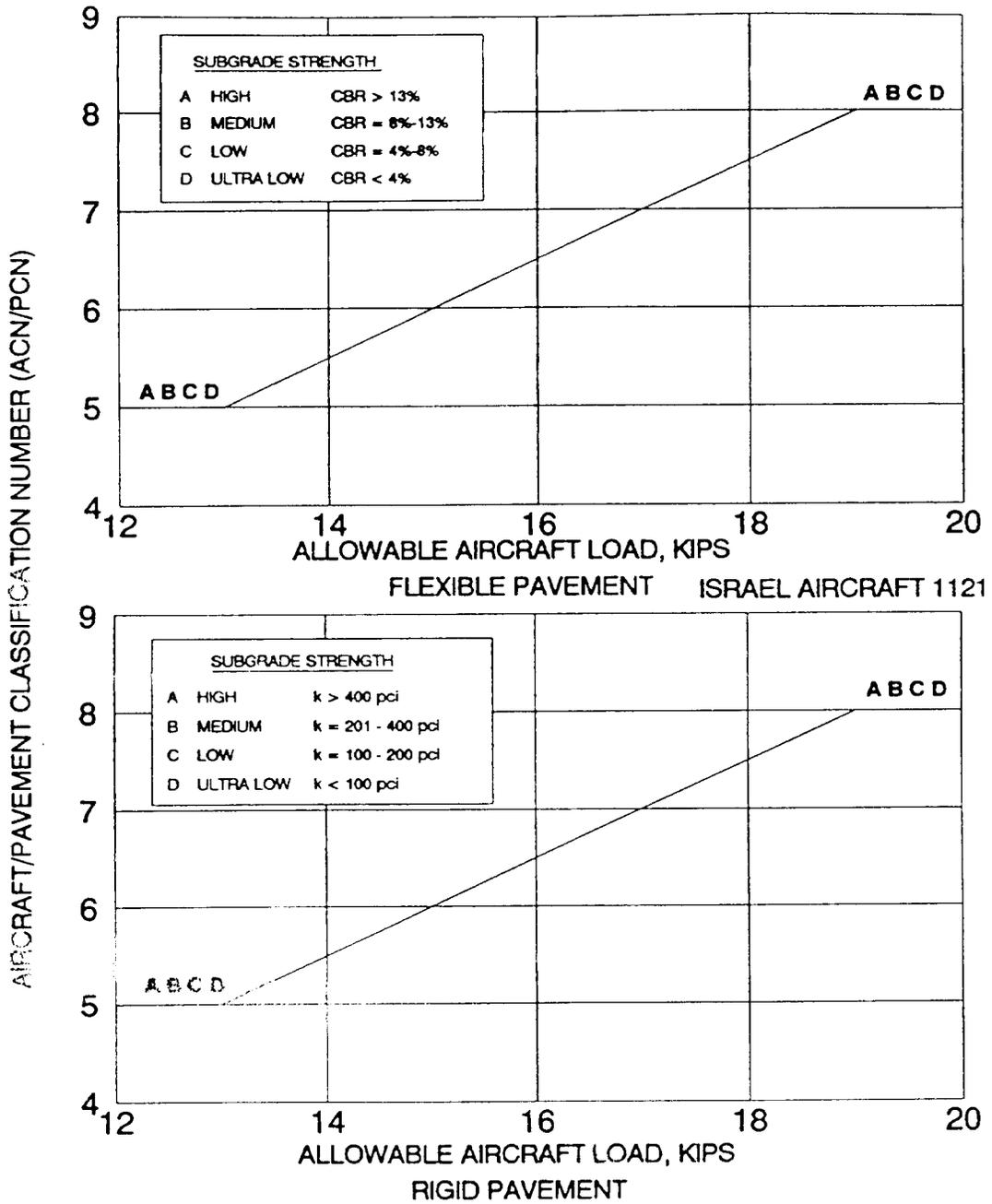


Figure A-306. Israel Aircraft 1121, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Israel Aircraft Industries

Aircraft Engine Manufacturer General Electric (CJ610-9)

No. of Engines 2 Engine Rating 3,100 lb

Min. T/O Wt. 13.5 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 20.5 k-lb Max. T/O Wt. War-Time 20.5 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 3,050 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 14.3 k-lb Max. Ldg. Wt. 19.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. †

* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,100 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
14	6	6	6	6	5	5	5	6
19	8	8	8	8	8	8	8	8
21	9	9	9	9	8	8	9	9

Figure A-307. Israel Aircraft 1123, Commodore Jet

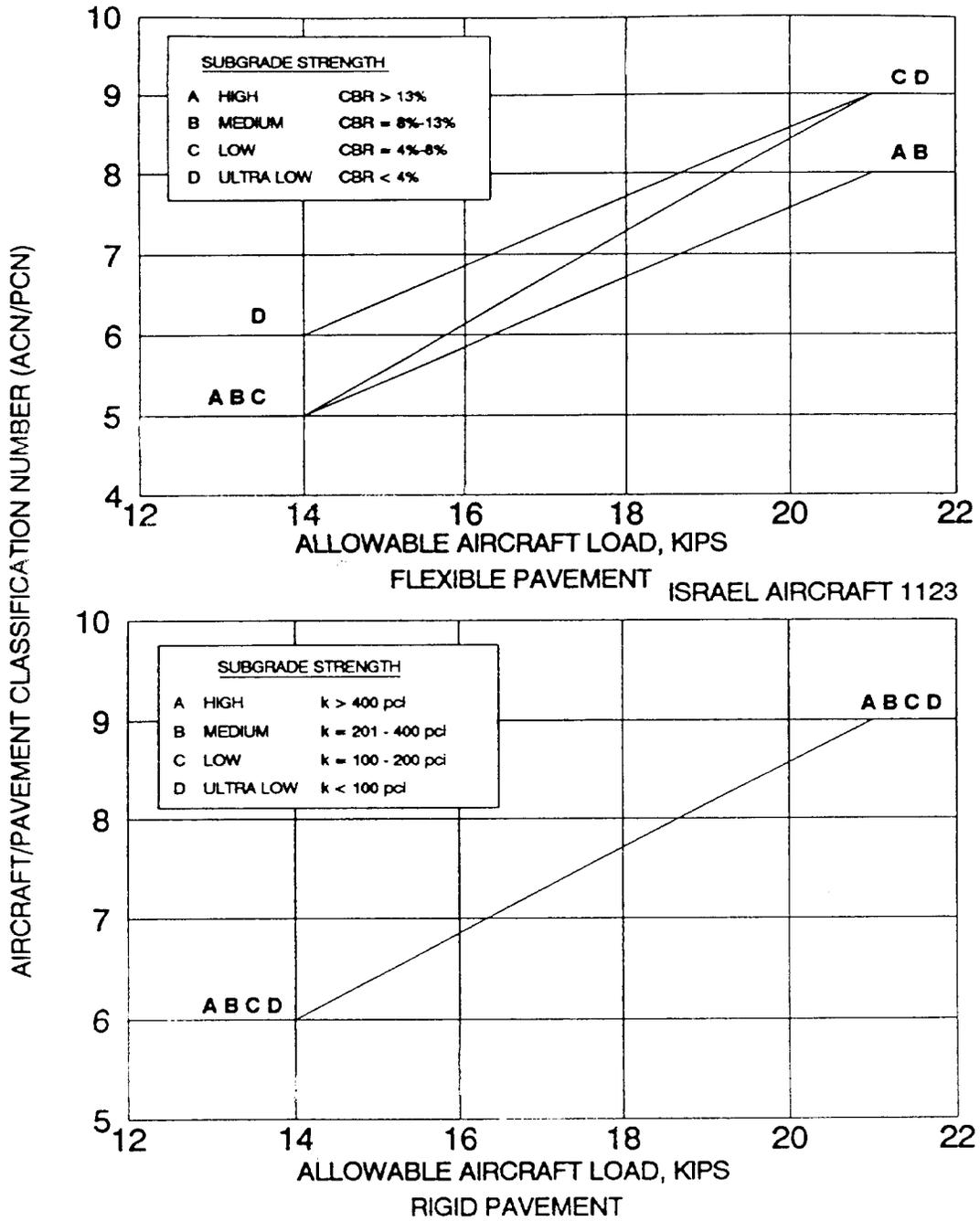


Figure A-308. Israel Aircraft 1123, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3D-3)

No. of Engines 4 Engine Rating 17,000 lb

Min. T/O Wt. 158.7 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 257.3 k-lb Max. T/O Wt. War-Time 257.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 7,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 180.4 k-lb Max. Ldg. Wt. 190.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 6,250 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,500 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
180	18	21	24	28	19	21	24	32
190	19	23	26	30	20	22	26	35
257	29	33	40	47	31	34	41	54

Figure A-309. Boeing 707-120B

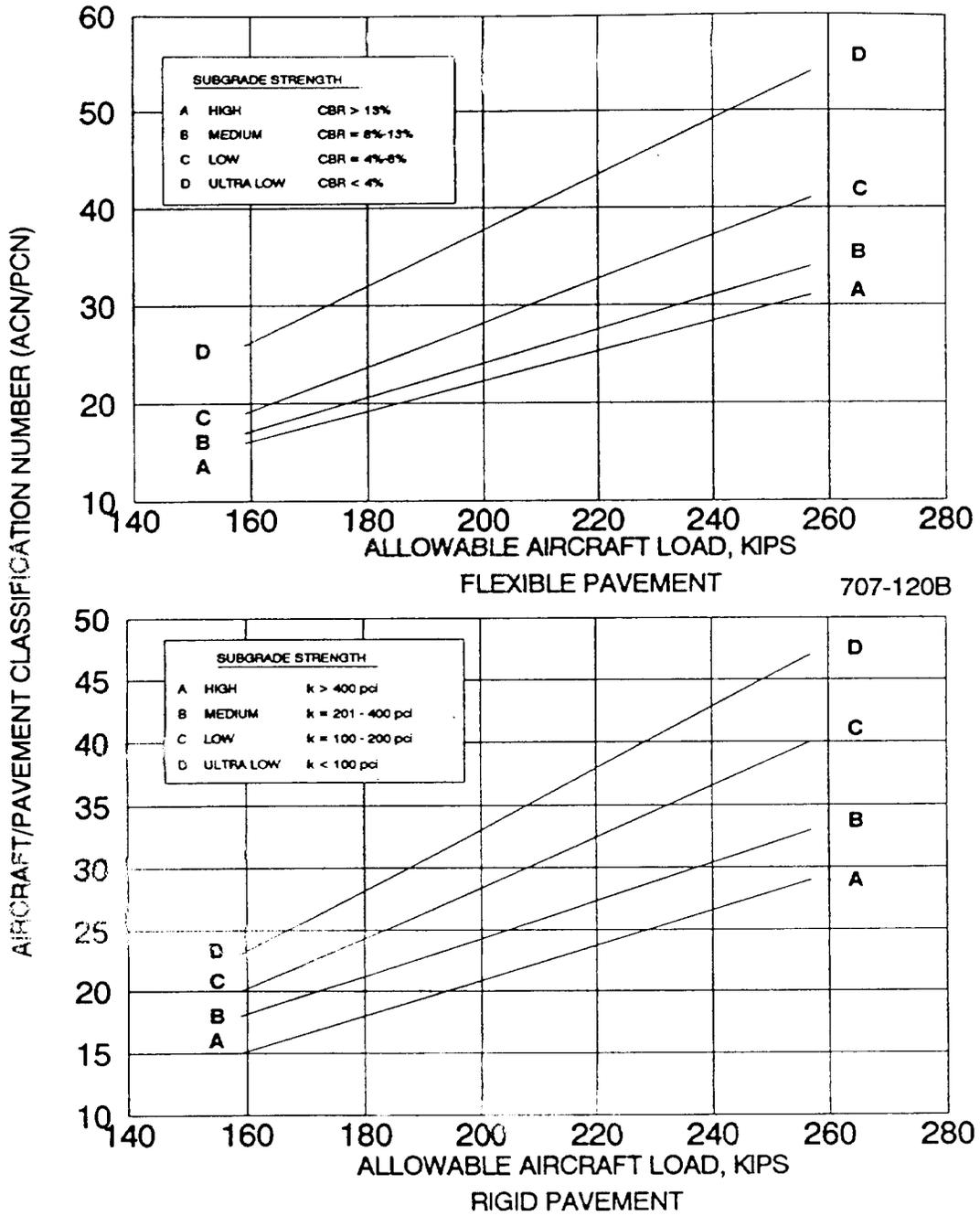


Figure A-310. Boeing 707-120B, ACN/PCN Curves

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT4A-11,-12)

No. of Engines 4 Engine Rating 17,500 lb

Min. T/O Wt. 185.5 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 312.0 k-lb Max. T/O Wt. War-Time 312.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 10,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 204.3 k-lb Max. Ldg. Wt. 207.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 7,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,250 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
204	22	25	29	34	21	24	29	39
207	22	26	30	35	22	25	30	40
312	38	44	52	60	40	45	54	70

Figure A-311. Boeing 707-320

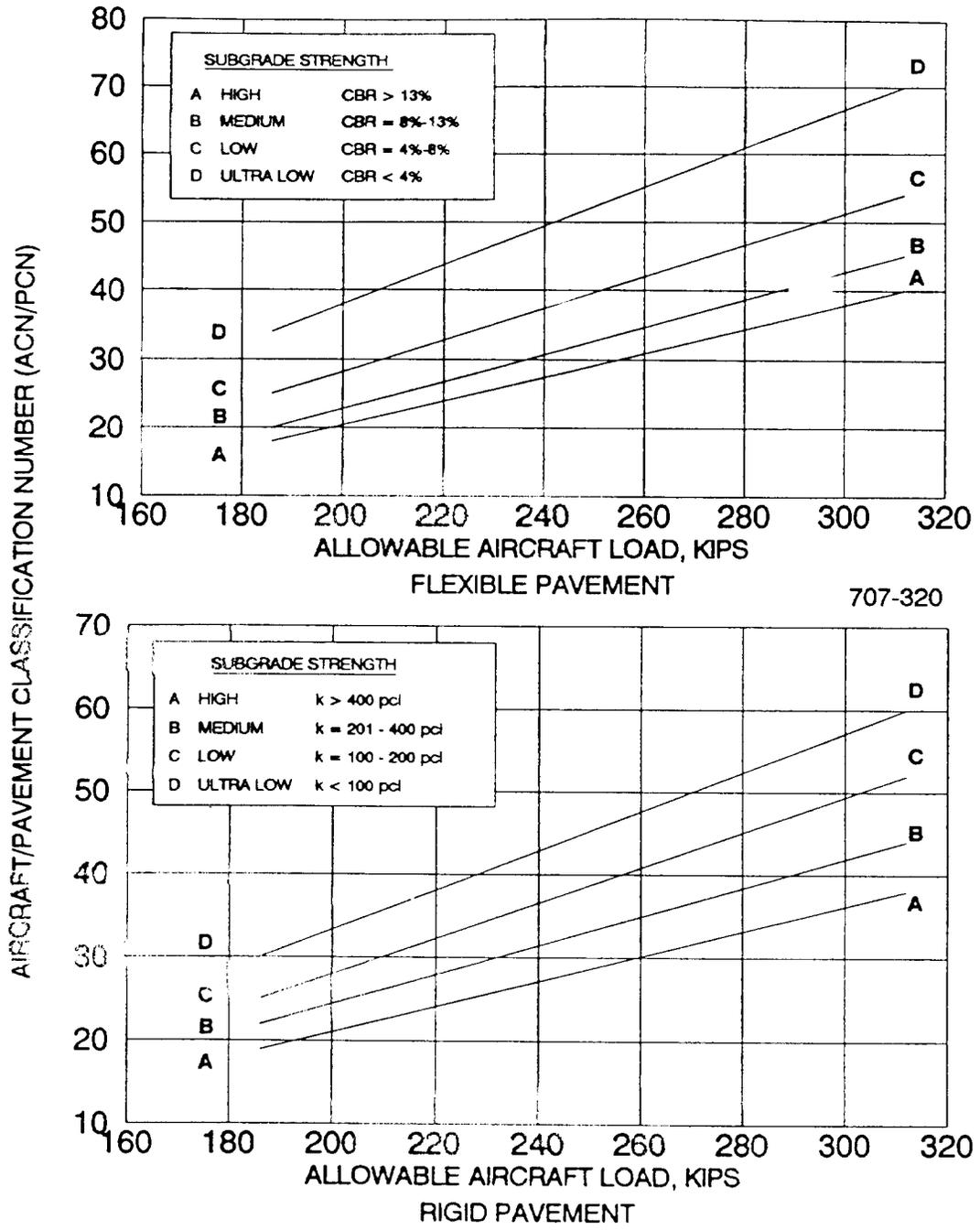


Figure A-312. Boeing 707-320, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3D-7)

No. of Engines 4 Engine Rating 19,000 lb

Min. T/O Wt. 191.7 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 333.6 k-lb Max. T/O Wt. War-Time 335.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 9,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 209.3 k-lb Max. Ldg. Wt. 215.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 5,900 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,000 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
209	23	25	30	35	22	25	30	40
215	24	26	31	36	23	26	31	42
334	42	49	58	65	45	50	61	77
335	42	49	58	65	45	50	61	77

Figure A-313. Boeing 707-320B

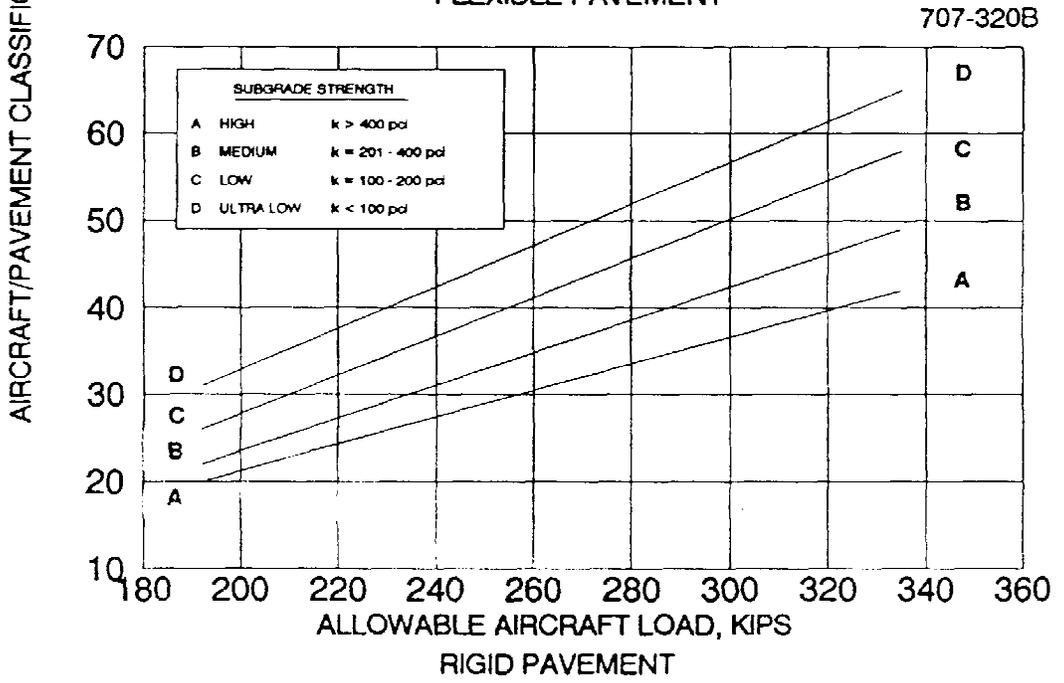
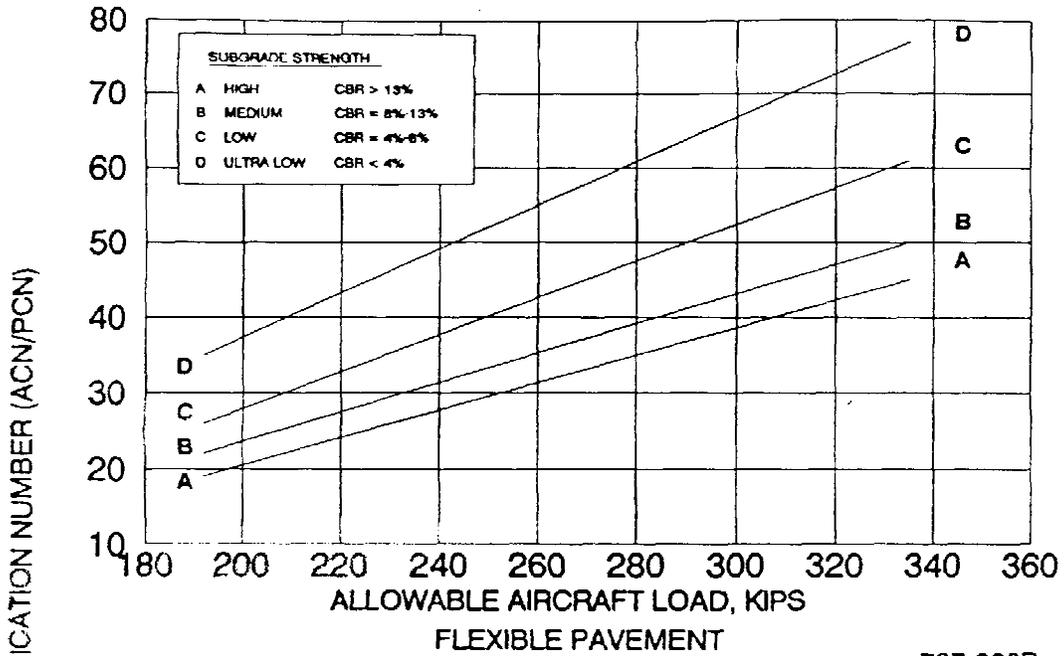


Figure A-314. Boeing 707-320B, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3D-7)

No. of Engines 4 Engine Rating 19,000 lb

Min. T/O Wt. 198.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 333.6 k-lb Max. T/O Wt. War-Time 335.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 10,000 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 244.3 k-lb Max. Ldg. Wt. 247.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 6,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,250 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
244	27	31	36	43	28	31	38	50
247	27	32	37	44	29	32	39	51
334	42	49	58	65	45	50	61	77
335	42	49	58	65	45	50	61	77

Figure A-315. Boeing 707-320C

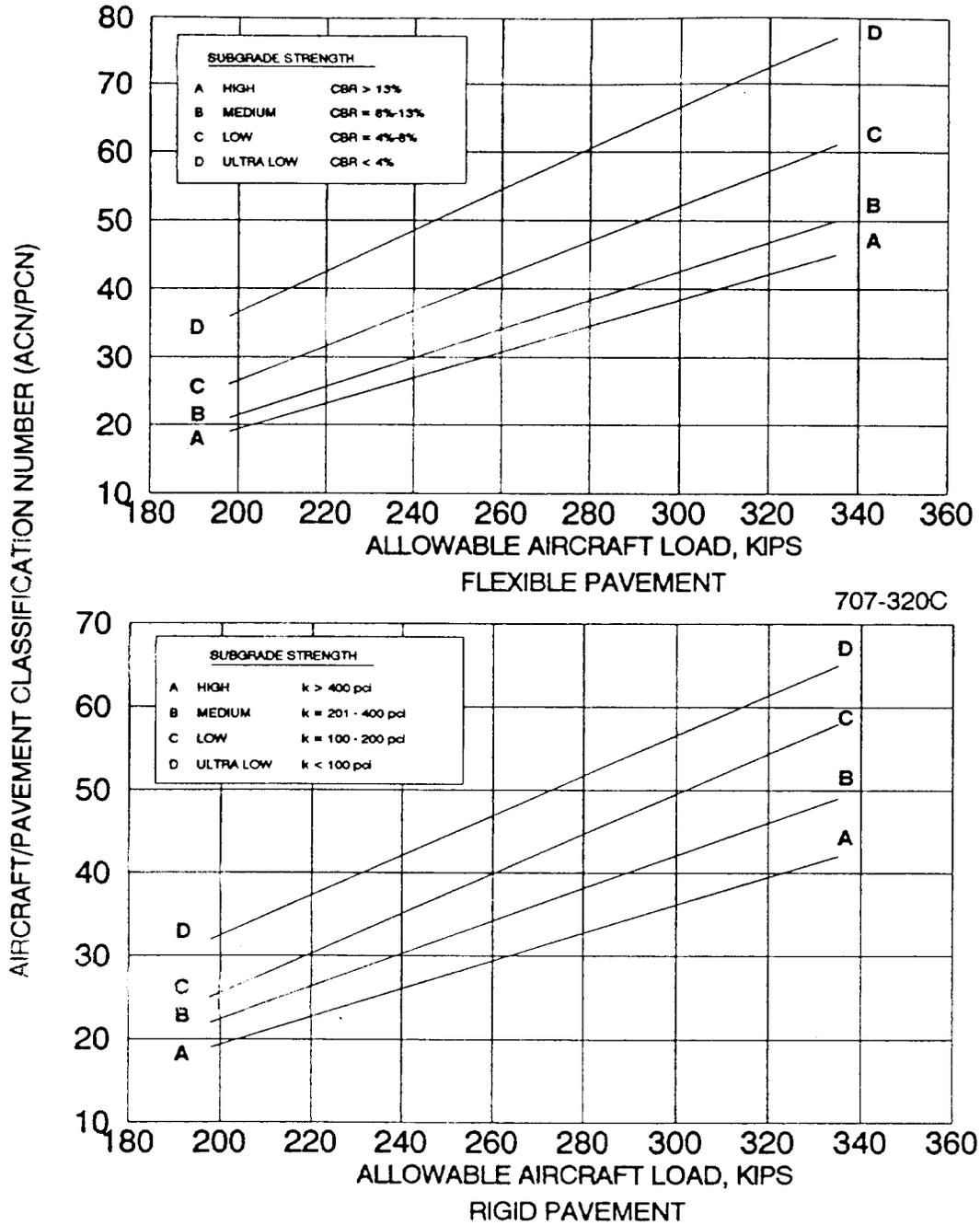


Figure A-316. Boeing 707-320C, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Rolls-Royce (MK 508)

No. of Engines 4 Engine Rating 17,500 lb

Min. T/O Wt. 185.5 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 312.0 k-lb Max. T/O Wt. War-Time 312.0 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 10,500 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 204.3 k-lb Max. Ldg. Wt. 207.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 7,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,250 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
204	22	25	29	34	21	24	29	39
207	22	26	30	35	22	25	30	40
312	38	44	52	60	40	45	54	70

Figure A-317. Boeing 707-420

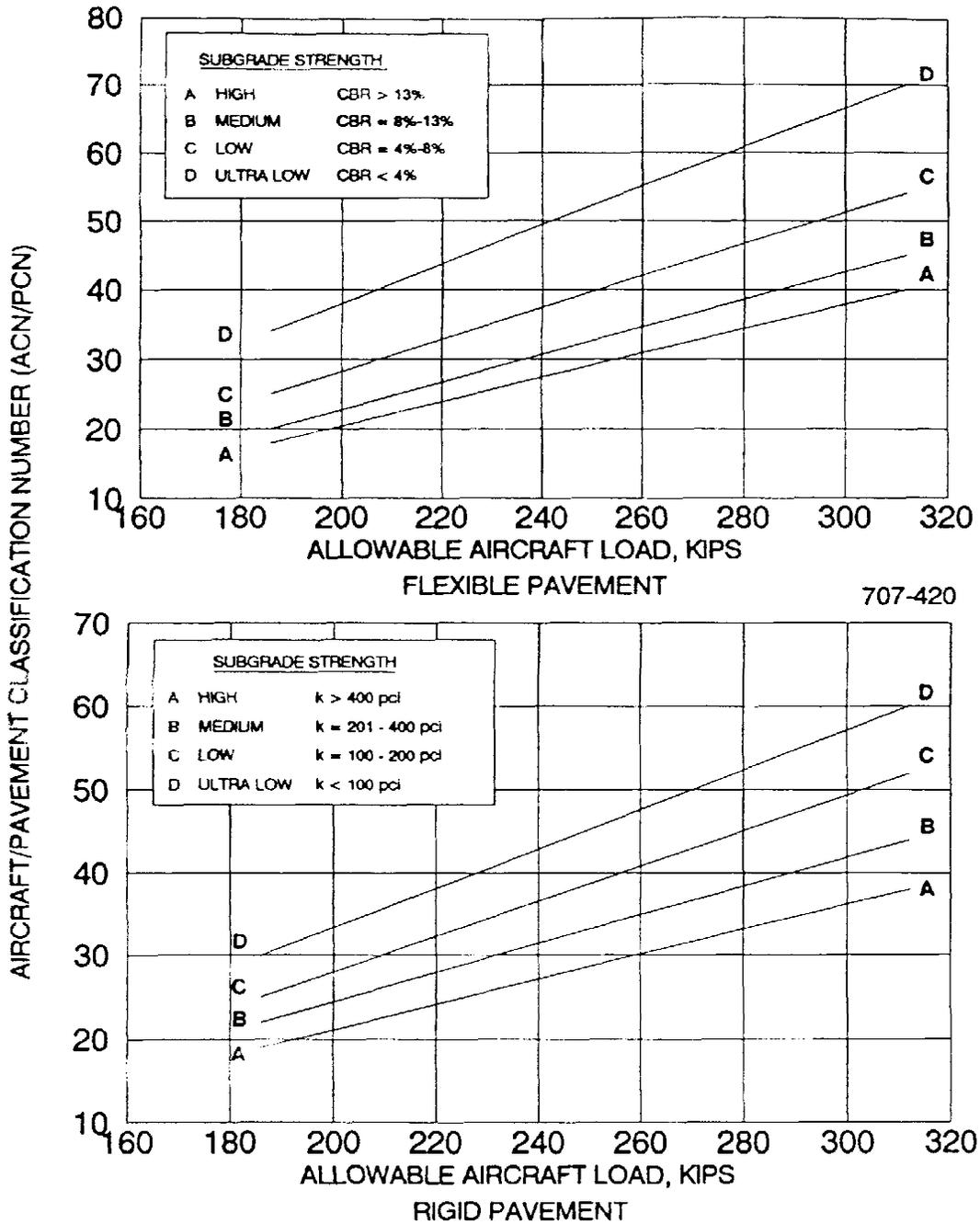


Figure A-318. Boeing 707-420, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3C-7)

No. of Engines 4 Engine Rating 12,000 lb

Min. T/O Wt. 139.7 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 229.3 k-lb Max. T/O Wt. War-Time 229.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 9,000 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 148.6 k-lb Max. Ldg. Wt. 175.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 5,500 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,100 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High	Medium	Low	Ultra	High	Medium	Low	Very
	A	B	C	D	A	B	C	D
149	15	16	20	23	14	16	19	27
175	18	21	25	29	18	21	25	34
229	25	30	35	42	27	31	38	50

Figure A-319. Boeing 720

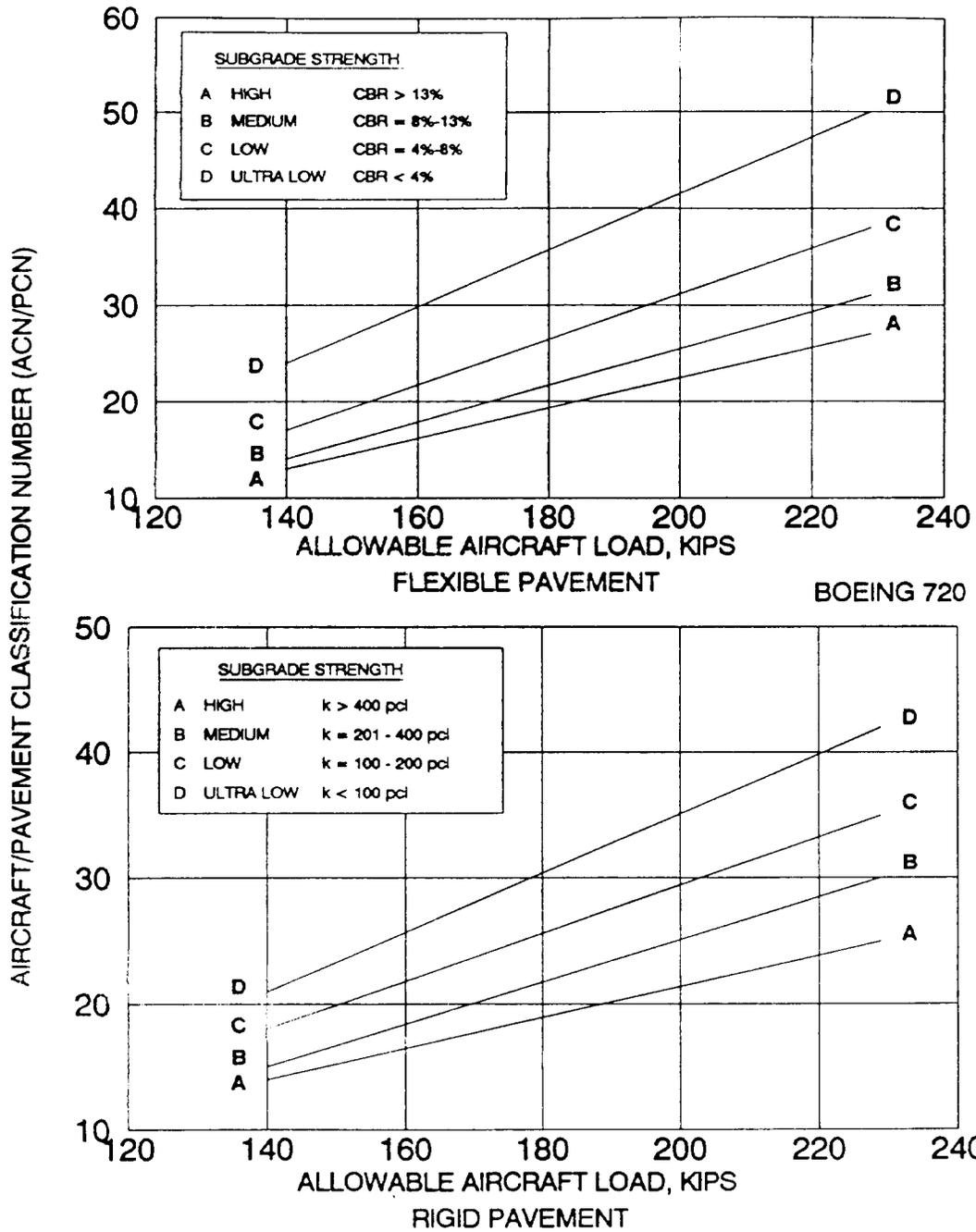


Figure A-320. Boeing 720, ACN/PCN Curves

ETL 1110-3-394
27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (JT3D-3)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 144.0 k-lb * Min. T/O Dist. @ Min. T/O Wt. †

* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. †

Max. T/O Wt. Peace-Time 234.3 k-lb Max. T/O Wt. War-Time 234.3 k-lb

* Min. T/O Dist. @ Max. T/O Wt. War-Time 6,100 ft

* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. †

Min. Ldg. Wt. 165.7 k-lb Max. Ldg. Wt. 175.0 k-lb

* Min. Ldg. Dist. @ Min. Ldg. Wt. 6,100 ft

* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,300 ft

* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Very Low D
166	17	19	23	27	17	19	23	32
175	18	21	25	29	18	21	25	34
234	26	31	36	43	28	32	39	51

Figure A-321. Boeing 720B